

**AMENDMENTS TO THE SPECIFICATION**

Paragraph starting at page 4, line 1:

Fig. 1 is a cross section illustrating a first embodiment according to the invention. The first embodiment according to the invention will be described with Fig. 1. An acceleration sensor of the first embodiment according to the invention is configured of a mounting board 12 and a sensor chip 11 in which the mounting board 12 is bonded to the sensor chip 11 with a molding resin 16 and the sensor chip 11 is formed of a weight 13, a beam 14 and a frame 15. Then, the weight 13 is surrounded by the frame 15. The weight 13 is joined to the frame 15 by a plurality of the beams 14, and the weight 13 is separated from the mounting board 12 by being supported by the beams 15. In the acceleration sensor, the weight 13 senses acceleration toward the mounting board 12 in the vertical direction, and the weight 13 moves vertically. The resistance value of the beams 14 supporting the weight 13 is varied at this time, and thus current is carried through the beams 14 to sense the resistance value for measuring the acceleration. In the first embodiment according to the invention, a thin, rectangular stopper 17 is disposed on the mounting board 12 right under the weight 13. The stopper 17 is

disposed to reduce the distance between the weight 13 and the mounting board [[11]] 12.

Therefore, even though a great acceleration is applied to the weight 13, the weight 13 does not move more than a fixed distance in the direction of the mounting board because the stopper 17 on the mounting board [[11]] 12 contacts the weight 13. Accordingly, the possibility that an excessive stress is applied to the beams 14 supporting the weight 13 to destroy the beams 14 is eliminated. In addition, the possibility that the molding resin 16 bonding the frame 15 to the mounting board [[11]] 12 flows into the inside of the frame 15 and the molding resin 16 reaches under the weight 13 to bond the mounting board [[11]] 12 to the weight 13 does not occur because the stopper 17 is raised from the mounting board [[11]] 12.

Paragraph starting at page 5, line 9:

Fig. 2 is a cross section illustrating a second embodiment according to the invention.

The second embodiment according to the invention will be described with Fig. 2. An acceleration sensor of the second embodiment according to the invention has nearly the same structure as that of the first embodiment, which has the structure that a sensor chip

[[22]] 21 formed of a weight 23, a beam 24 and a frame 25 is bonded to a mounting board [[21]] 22 with a molding resin 26. The acceleration sensor of the second embodiment does not have the stopper 17 in the first embodiment. Instead, projections 27 are disposed on the surface of the weight 23 facing the mounting board [[21]] 22. Therefore, as similar to the first embodiment, even though a great acceleration is applied to the weight 23, the weight 23 does not move more than a fixed distance in the direction of the mounting board [[21]] 22 because the projections 27 disposed on the weight 23 contact the mounting board 32. Accordingly, the possibility that an excessive stress is applied to the beams 24 supporting the weight 23 to destroy the beams 24 is eliminated.

Paragraph starting at page 6, line 4:

Fig. 3 is a cross section illustrating a third embodiment according to the invention.

The third embodiment according to the invention will be described with Fig. 3. An acceleration sensor of the third embodiment according to the invention has nearly the same structure as that of the second embodiment, which has the structure that a sensor chip [[32]] 31 formed of a weight 33, a beam 34 and a frame 35 is bonded to a mounting board [[31]]

32 with a molding resin 36. In the acceleration sensor of the third embodiment, the diameter (M) of the tip end part of a projection 37 mounted on the weight 33 is smaller than the diameter (L) of the base part of the projection 37. More specifically, the form of the projection 37 is a cone shape or a pyramid shape where the surface mounted on the weight 33 is the bottom. The third embodiment has the same advantage as that of the second embodiment because the projections 37 are disposed on the surface of the weight 33 facing the mounting board [[31]] 32. Additionally, since the tip end part of the projections 37 is smaller than the base part of the projections 37, the molding resin 36 is hard to attach to the projections 33 even though the molding resin 36 bonding the frame 35 to the mounting board [[31]] 32 flows into the inside of the frame 35 and the molding resin 36 reaches under the weight 33. Therefore, an advantage to reduce the possibility that the mounting board [[31]] 32 is bonded to the weight 33 can be expected.